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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,755	02/23/2004	Masaharu Edo	D-1578	6182
7590 01/09/2008 HAUPTMAN KANESAKA BERNER PATENT AGENTS, LLP 1700 Diagonal Road, Suite 310 Alexandria, VA 22314			EXAMINER SCHILLINGER, LAURA M	
			ART UNIT 2813	PAPER NUMBER
			MAIL DATE 01/09/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/782,755

Applicant(s)

EDO ET AL.

Examiner

Laura M. Schillinger

Art Unit

2813

Period for Reply
-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 13-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/5/07
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayashi (JP 2001-196542).

Hayashi teaches the following claimed limitations as cited below:

1. A micro power converter with multiple outputs, comprising:

a semiconductor substrate having a semiconductor integrated circuit (1), a plurality of thin film magnetic induction components electrically connected to the semiconductor integrated circuit and having a plurality the magnetic insulation substrates (11), said plurality of thin film magnetic induction components being spaced apart from each other with a gap therebetween (0004 and layer 5), one magnetic insulation substrate (1) forming one thin film magnetic induction component with the coil conductor thereon being spaced with a gap from another magnetic insulation substrate (8) forming another thin film magnetic induction component with the coil conductor thereon, and
a capacitor electrically connected to the semiconductor integrated circuit (20) (Fig.3).

2. A micro power converter according to claim 1, further comprising a magnetic isolation layer disposed in the gap between the magnetic insulation substrates for magnetically isolating the thin film magnetic induction components (Fig.1 (5) and (0004).

3. A micro power converter according to claim1, wherein each of said thin film magnetic induction components includes one of said magnetic insulation substrates (8), a coil conductor formed on the one magnetic insulation substrate (6), and a plurality connection terminals (9 or 10) formed at a peripheral portion of said one magnetic insulation substrate (8), said plurality of the thin film magnetic induction components (11) being arranged with the gap(5) and attached at the plurality of the connection terminals (9 or 10).

4. A micro power converter according to claim 1, wherein said plurality of the magnetic insulation substrates is formed of a ferrite substrate (8).

5. A micro power converter according to claim wherein said magnetic isolation layer is formed of a non-magnetic material (0011).

6. A micro power converter according claim non-magnetic material is a resin material (0011).

7. A micro power converter according claim non-magnetic material is a ceramic material (0011).

8. A micro power converter according to claim 3, wherein said plurality of the connection terminals is formed on each of plurality of the magnetic insulation substrates same planar positions, said plurality of the connection terminals connected to two ends of each coil inductor and located on one magnetic insulation substrate being located at planar positions different from those of another magnetic insulation substrate (Fig.3 (10)).

9. A micro power converter according to claim 8, wherein one said plurality of the connection terminals formed on one magnetic insulation substrate faces another magnetic insulation substrate, and has a height greater than that coil conductor formed on the one magnetic insulation substrate (Fig.3 (10)).

10. A micro power converter according to claim 3, wherein said plurality of the connection terminals includes a first terminal formed on a front surface of one magnetic insulation substrate and a second terminal formed on a rear surface of the one magnetic insulation substrate, said first terminal being electrically connected to the second terminal through a hole formed in the one magnetic insulation substrate (Fig.3 (10)).

11. A micro power converter according to claim 10, wherein said semiconductor substrate electrically connected to the first terminal (Fig.3 (10)).

12. A micro power converter according to claim 10, wherein said capacitor is electrically connected to the first terminal (Fig.3 (10)).

Response to Arguments

Applicant's arguments filed 10/18/07 have been fully considered but they are not persuasive. Applicant argues that the amended claim limitations is not taught by Hayashi, and argues that the thick ferrite layer 8 acts only to prevent warpage of the silicon substrate and therefore no second magnetic insulating substrate is taught by Hayashi. However this argument is not persuasive because the Examiner interprets the thick ferrite layer as a substrate. Applicant's own specification teaches that a magnetically insulating substrate may be formed of ferrite material and therefore the Examiner interprets layer 8 to be second substrate and the first substrate to be the silicon substrate 1.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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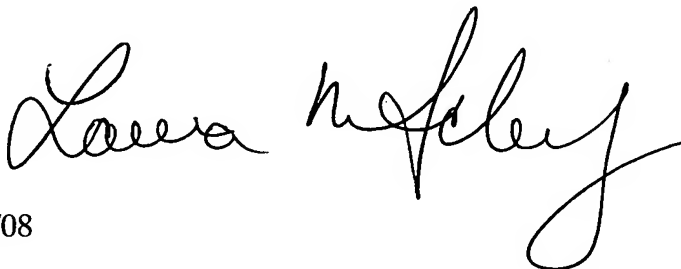
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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M. Schillinger whose telephone number is (571) 272-1697. The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W. Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Laura M. Schillinger', with a long, sweeping horizontal stroke at the end.

Laura M Schillinger
Primary Examiner
Art Unit 2813

1/5/08